

Amendments to the Claims

Please cancel Claims 1-4, 6-13, 15, 16 and 20-24 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 5 and 14 to read as follows.

Claims 1-4 (Canceled).

5. (Currently Amended) An ink jet printing apparatus as-claimed in claim 4; to form an image on a print medium by ejecting ink onto the print medium from a plurality of nozzles arrayed in a print head, the printing apparatus comprising:

recovery means to recover a normal ink ejection state of each nozzle in the print head;

recovery operation determining means for dividing the nozzles into a plurality of blocks, the nozzles divided into the plurality of blocks forming a nozzle array, the plurality of blocks being divided in a length direction of the nozzle array, counting the number of ejections from the nozzles in each block and, based on the accumulated number of ejections for each block, determining whether or not to execute a recovery operation of said recovery means, wherein said recovery operation determining means determines to execute the recovery operation on the print head when at least one of the accumulated numbers of ejections for the individual blocks reaches a predetermined threshold; and

accumulated ejection number correction means to correct by a weighting value the accumulated number of ejections counted for each block,

wherein said recovery operation determining means compares the accumulated numbers of ejections corrected by said accumulated ejection number correction means with the predetermined threshold, and

wherein said accumulated ejection number correction means increases the weighting value as the position of the associated nozzle block is farther away from an ink supply port of the print head and multiplies the accumulated number of ejections by the associated weighting value to correct the accumulated number of ejections.

Claims 6-13 (Canceled).

14. (Currently Amended) An ink jet printing apparatus as claimed in claim 13, to form an image on a print medium by using a print head, wherein the print head includes a plurality of nozzles for ejecting ink, an ink supply port to receive a supply of ink, a liquid chamber to deliver the supplied ink to the nozzles, and a plurality of nozzle heaters provided one in each nozzle to heat the ink and thereby form a bubble in ink in each nozzle to eject the ink by a pressure of the expanding bubble, the printing apparatus comprising:

print head recovery means to recover a normal ink ejection state of each nozzle in the print head;

recovery operation determining means for determining whether or not to execute a recovery operation of said print head recovery means; and
an accumulated print dot number counter to divide the nozzles of the print head into a plurality of blocks, the nozzles divided into the plurality of blocks forming a nozzle array, the plurality of blocks being divided in a length direction of the nozzle array, and count the accumulated number of print dots for each block,

wherein said recovery operation determining means determines, based on a value of said accumulated print dot number counter, whether or not to execute the recovery operation, and

wherein a target accumulated print dot number, on which is based a decision to execute the recovery operation, is set large for blocks near the ink supply port.

Claims 15-17 (Canceled).

18. (Previously Presented) An ink jet printing apparatus comprising:
print head recovery means to recover a normal ink ejection state of each
nozzle in a print head;

memory means to store an accumulated number of print dots printed by
each of the nozzles; and

recovery operation determining means for setting different target print
dot numbers to different nozzles and checking if the accumulated number of print dots
printed by each of the nozzles has reached the corresponding target print dot number, in
order to determine whether or not to execute a recovery operation of said print head
recovery means,

wherein the target print dot number, on which is based a decision to
execute the recovery operation, is set large for nozzles near an ink supply port.

19. (Previously Presented) An ink jet printing apparatus comprising:
print head recovery means to recover a normal ink ejection state of each
nozzle in a print head;

memory means to store an accumulated number of print dots printed by
each of the nozzles; and

recovery operation determining means for setting different target print dot numbers to different nozzles and checking if the accumulated number of print dots printed by each of the nozzles has reached the corresponding target print dot number, in order to determine whether or not to execute a recovery operation of said print head recovery means,

wherein the target print dot number, on which is based a determination to execute the recovery operation, is set large for a central portion of the print head and small for end portions of the print head.

Claims 20-24 (Canceled).